

REMARKS/ARGUMENTS

In the Office Action dated December 28, 2009 (hereinafter, "Office Action"), claims 1, 2, 4-6, 23, 25-32 and 35 stand rejected under 35 U.S.C. § 102(e). Claims 3, 7-22, 24, 33, 34 and 36-38 stand rejected under 35 U.S.C. § 103(a). By this paper, claims 1, 3, 8, 10, 19, 22, 23, 25, 29-31, 36, 36 and 38 have been amended. Claims 2 and 9 have been canceled. No new matter has been added.

Applicants respectfully respond to the Office Action.

I. Claims 1, 2, 4-6, 23, 25-32 and 35 Rejected Under 35 U.S.C. § 102(e)

Claims 1, 2, 4-6, 23, 25-32 and 35 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,269,423 to Lee et al. (hereinafter, "Lee"). Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131 (citing Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). "The identical invention must be shown in as complete detail as is contained in the ... claim." Id. (citing Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). In addition, "the reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." In re Paulsen, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Claim 1 as presented herein now recites "wherein the admission profile is indicative of expected average data requirements for flows already admitted." This amendment is supported by at least paragraph [0062], for example, of Applicants' specification. Lee does not disclose this subject matter.

Instead, Lee describes “QoS-based call admission system and method for a mobile communication system.” (Lee, abstract.) In Lee, a “profile server 40 stores information in user profiles such as the Identifier (ID) of each subscriber and authentication parameter[s].” (Lee, col. 1, lines 45-47.) The “profile server” also includes a “Service Type, indicating the type of service and a Service QoS Parameter Recorder containing a set of parameters related to a QoS level required from the service.” (Lee, col. 4, lines 44-47.) As best understood, the Office Action appears to correspond the information in the “user profile” in Lee to the “admission profile” in amended claim 1. (See Office Action, pages 2-3.) However, this does not disclose that “the admission profile is indicative of expected average data requirements for flows already admitted.” Specifically, the “user profile” in Lee does not have anything to do with “expected average data requirements.” Rather, in a first embodiment illustrated in Figure 3A, the “QoS parameter Recorder is determined according to the definition of QoS that minimum x bits and maximum z bits are transmitted for y seconds.” (Lee, col. 4, lines 55-57.) In a second embodiment illustrated in Figure 3B, the “definition of QoS...is defined to be” a “minimum x bits per y second,” a “maximum z bits per y second,” a “minimum x bits per y second with a weighting factor α ($\alpha \leq 1$),” or a “maximum z bits per y second with a weighting factor β ($\beta \leq 1$).” (See Lee, col. 5, lines 3-13.) Therefore, the “QoS parameter” is defined by either a range of data rates as in the first embodiment or an upper or lower data rate limit as in the second embodiment. However, defining a data rate range or a single data rate limit is different than “indicat[ing] expected average data requirements.” Therefore, Lee does not disclose that “the admission profile is indicative of expected average data requirements for flows already admitted,” as recited in amended claim 1.

Claim 1 also now recites that “capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators.” This amendment is

supported by at least Figure 6 and paragraphs [0074]-[0075], for example, of Applicants' specification. Lee does not disclose this subject matter.

Instead, Lee describes that, in response to a call setup request being received, a "BTS" or a "BSC" performs a "CAC [Call Admission Control]" to determine resource availability. (See Lee, Figure 5 (BTS) and Figure 9 (BSC).) Then, the "Service Types and Service QoS Parameter Recorders" are sent in a message and used "to determine the availability of required resources when a channel is assigned for a call setup." (Lee, col. 7, lines 47-53.) The "BTS" or "BSC" then calculates available resources, and if there are sufficient resources, "assigns the bandwidth to the BTS 10 according to the requested data rate and assigns radio resource[s] within the BSC [or BTS]." (See Lee, Figures 5 and 9; col. 9, lines 18-20.) However, this does not disclose that "capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators." Rather, the "bandwidth" that is assigned is "according to the requested data rate" and "the availability of required resources." As discussed above, the "QoS Parameter Recorders" do not indicate "expected average data requirements," and are therefore not the same as the "capacity commitments in the admission profile." Furthermore, as illustrated by Figure 9, if *all* of the resources are not available to comply with the requested QoS, none of the resources are allocated. (See Figure 9, elements 506, 510, 512, 516.) In contrast, amended claim 1 requires that "capacity is allocated for remote devices with capacity commitments in the admission profile *limited to* their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators." Therefore, as stated in paragraph [0074] of Applicants' specification, "an allocation...may not satisfy the entire requested amount of data [because] variable-rate data sources often generate more data than the average amount that may have been used for contracting." (Specification, par. [0074].) Therefore, Lee does not disclose that "capacity is allocated for remote devices with capacity commitments in the admission profile

limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators,” as recited in amended claim 1.

For at least the foregoing reasons, Applicants respectfully submit that amended claim 1 is allowable. Claims 4-6 depend from claim 1, and are therefore allowable for at least the same reasons as claim 1. Claim 2 is being canceled.

Claim 23 as presented herein recites “expected average data requirements” and that “capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators.” As discussed above, Lee does not disclose this claimed subject matter. Accordingly, Applicants respectfully submit that amended claim 23 is allowable.

Claim 25 as presented herein recites “expected average data requirements” and that “capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators.” Accordingly, Applicants respectfully submit that amended claim 25 is allowable. Claims 26-29 depend from claim 25, and are therefore allowable for at least the same reasons as claim 25.

Claim 30 as presented herein recites “expected average data requirements” and “allocating capacity according to the remote devices with located commitments limited to their capacity commitments before allocating remaining capacity to any unsatisfied transmission indicators.” Accordingly, Applicants respectfully submit that amended claim 30 is allowable.

Claim 31 as presented herein recites “expected average data requirements” and that “capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators.” Accordingly, Applicants respectfully submit that amended claim 31 is allowable. Claim 32 depends from claim 31, and is therefore allowable for at least the same reasons as claim 31.

Claim 35 as presented herein recites “expected average data requirements” and that “capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators.” Accordingly, Applicants respectfully submit that amended claim 35 is allowable.

II. Claim 7 Rejected Under 35 U.S.C. § 103(a)

Claim 7 stands rejected under 35 U.S.C. § 103(a) based on Lee in view of U.S. Patent No. 6,728,270 to Meggers et al. (hereinafter, “Meggers”). Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

Claim 7 depends from claim 1. As discussed above, Applicants respectfully submit that claim 1 should be allowable. Accordingly, Applicants respectfully submit that claim 7 should also be allowable for at least the same reasons as presented above in connection with claim 1.

III. Claim 3 Rejected Under 35 U.S.C. § 103(a)

Claim 3 stands rejected under 35 U.S.C. § 103(a) based on Lee in view of U.S. Patent No. 6,567,387 to Dulin et al. (hereinafter, “Dulin”). Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

Claim 3 depends from claim 1. As discussed above, Applicants respectfully submit that claim 1 should be allowable. Accordingly, Applicants respectfully submit that claim 3 should also be allowable for at least the same reasons as presented above in connection with claim 1.

IV. Claims 8, 9, 11, 13-17, 19, 20, 22, 24, 33 and 34 Rejected Under 35 U.S.C. § 103(a)

Claims 8, 9, 11, 13-17, 19, 20, 22, 24, 33 and 34 stand rejected under 35 U.S.C. § 103(a) based on Lee in view of U.S. Patent No. 6,650,630 to Haartsen (hereinafter, “Haartsen”).

Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

The factual inquiries that are relevant in the determination of obviousness are determining the scope and contents of the prior art, ascertaining the differences between the prior art and the claims in issue, resolving the level of ordinary skill in the art, and evaluating evidence of secondary consideration. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007) (citing Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966)). As the Board of Patent Appeals and Interferences has recently confirmed, "obviousness requires a suggestion of all limitations in a claim." In re Wada and Murphy, Appeal 2007-3733 (citing CFMT, Inc. v. Yieldup Intern. Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003)).

Amended claim 8 recites "expected average data requirements" and that "capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators." As discussed above, Lee does not teach or suggest this claimed subject matter.

Haartsen does not cure the deficiencies of Lee. In the Office Action, the Examiner did not assert that Haartsen teaches or suggests anything about an "admission profile [that] is indicative of expected average data requirements for flows already admitted" or about "allocat[ing] capacity" limited to the "expected average data requirements" as recited in amended claim 8. Nor can Applicants find any part of Haartsen that teaches or suggests this claimed subject matter. Rather, Haartsen describes a "controller [that] analyzes the requested bandwidth ratios and allocates slots in the base station radios according to a packing scheme that synchronizes the transmission and receive timing of the multiple base station radios communication links." (Haartsen, abstract.) Specifically, Haartsen uses the "remote terminal's required bandwidth ratio" to allocate slots, not the "expected average data requirements." (See Haartsen, col. 4, lines 52-65.)

Therefore, Applicants respectfully submit that the combination of Lee and Haartsen does not teach or suggest all of the subject matter of claim 8. Accordingly, Applicants respectfully submit that amended claim 8 is allowable. Claims 11, 13-17 and 19-20 depend from claim 8, and are therefore allowable for at least the same reasons as claim 8. Claim 9 is being canceled.

Amended claim 22 recites "expected average data requirements" and that "capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators." As discussed above, the combination of Lee and Haartsen does not teach or suggest this claimed subject matter. Accordingly, Applicants respectfully submit that amended claim 22 is allowable.

Claim 33-34 depend from claim 31. As discussed above, Applicants respectfully submit that claim 31 should be allowable. Accordingly, Applicants respectfully submit that claims 33-34 are allowable for at least the same reasons as presented above in connection with claim 31.

V. Claims 12 and 18 Rejected Under 35 U.S.C. § 103(a)

Claims 12 and 18 stand rejected under 35 U.S.C. § 103(a) based on Lee in view of Haartsen and further in view of Meggers. Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

Claims 12 and 18 depend from claim 8. As discussed above, Applicants respectfully submit that claim 8 should be allowable. Accordingly, Applicants respectfully submit that claims 12 and 18 should also be allowable for at least the same reasons as presented above in connection with claim 8.

VI. Claims 10 and 21 Rejected Under 35 U.S.C. § 103(a)

Claims 10 and 21 stand rejected under 35 U.S.C. § 103(a) based on Lee in view of Haartsen and further in view of Dulin. Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

Claims 10 and 21 depend from claim 8. As discussed above, Applicants respectfully submit that claim 8 should be allowable. Accordingly, Applicants respectfully submit that claims 10 and 21 should also be allowable for at least the same reasons as presented above in connection with claim 8.

VII. Claims 36 and 38 Rejected Under 35 U.S.C. § 103(a)

Claims 36 and 38 stand rejected under 35 U.S.C. § 103(a) based on Lee in view of U.S. Patent No. 7,085,279 to Kumar et al. (hereinafter, "Kumar"). Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

The standard to establish a *prima facie* case of obviousness is provided above.

Claim 36 as presented herein now recites "expected average data requirements" and that "capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators." As discussed above, the Lee does not teach or suggest this claimed subject matter.

Kumar does not make up for the deficiencies of Lee. In the Office Action, the Examiner did not assert that Kumar teaches or suggests anything about an "admission profile [that] is indicative of expected average data requirements for flows already admitted" or about "allocat[ing] capacity" limited to the "expected average data requirements" as recited in amended claim 36. Nor can Applicants find any part of Kumar that teaches or suggests this claimed

subject matter. In fact, Applicants are unable to find any explicit teachings in Kumar about “allocat[ing] capacity.”

Therefore, Applicants respectfully submit that the combination of Lee and Kumar does not teach or suggest “expected average data requirements” or that “capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators.” Accordingly, Applicants respectfully submit that amended claim 36 is allowable.

Amended claim 38 recites “expected average data requirements” and that “capacity is allocated for remote devices with capacity commitments in the admission profile limited to their capacity commitments before remaining capacity is allocated to any unsatisfied data transmission indicators.” As discussed above, the combination of Lee and Kumar does not teach or suggest this claimed subject matter. Accordingly, Applicants respectfully submit that amended claim 38 is allowable.

VIII. Claim 37 Rejected Under 35 U.S.C. § 103(a)

Claim 37 stands rejected under 35 U.S.C. § 103(a) based on Lee in view of Kumar in further view of Haartsen. Applicants respectfully request reconsideration in view of the above claim amendments and the following remarks.

Claim 37 depends from claim 36. As discussed above, Applicants respectfully submit that claim 36 should be allowable. Accordingly, Applicants respectfully submit that claim 37 should also be allowable for at least the same reasons as presented above in connection with claim 36.


CONCLUSION

In view of the foregoing, Applicants respectfully submit that all pending claims in the present application are in a condition for allowance, which is earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: March 23, 2010

By: 
Charles Eggers, Reg. No. 56,343
(858) 845-8413

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 845-8413
Facsimile: (858) 845-3986